

## SEVERE LOCAL STORMS FOR JULY 1947

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the United States Yearbook]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Marion, Miss.	July 1947 1	5 p. m.	11	0	\$5,000	High wind, possible tornado.	Path about 2 miles long. Wind estimated at 75 m. p. h., unroofed many houses, blew down trees, and wrecked wires. Some indications of twisting action, and some residents reported funnel not touching ground. Moved from northwest. Damage to growing crops, \$4,000.
Colfax County, south-central, N. Mex.	1	5-8:30 p. m.			52,225	Heavy hail, electric.	70 head of cattle killed; 3 autos damaged; considerable damage to railroad roadbed, highways, and bridges.
Hawley, Pa.	1					Thunderstorm	Damage to buildings and trees.
Rooks Co., Kans.	2	10 p. m.	440	0	10,000	Tornado	2 to 5 miles northeast of Plainville. Funnel cloud plainly seen. Moved from southwest; length of path, 2 miles.
Stafford, Pratt, and Kingman Cos., Kans.	3	1-2 a. m.	13-6		450,000	Heavy hail	Storm extended from near Stafford to southwestern Kingman County, with several localities in the 3 counties severely damaged. Hail ranged in size from marbles to oranges. Wheat suffered principal loss. Very heavy rain accompanied storm. Moved from north; length of path, 35-40 miles.
Oklahoma City, Okla., and vicinity.	3	5:40-6 a. m.			22,000	High wind, heavy rain.	Extensive damage to trees, signs, and buildings. Damage to buildings at Oklahoma City University estimated at \$20,000. Damage chiefly in northwest residential section of city. Power lines down.
Walsh Co., N. Dak.	3	6:30-8 p. m., C. S. T.	300	8	200,000	Tornado	First struck 3 miles south of Hoople, N. Dak., ended in vicinity of Alvarado, Minn. Probably originated in Manitoba. 11 people killed: 8 in N. Dak., 2 in Minnesota, 1 in Manitoba. 30 injured. Most serious damage done at Warsaw, Walsh Co.; 3 houses demolished, barns and other buildings smashed into kindling wood; debris scattered for miles. Knause Bridge, over the Forest River, 1 1/4 miles east of Warsaw, torn from concrete foundations; steel beams strewn along banks of river. Livestock losses severe. Length of path, about 30 miles.
Oslo, Minn., vicinity of.	3	7:45 p. m.	100	2	80,000	Tornado, hail	A number of farm buildings demolished; farm machinery, automobiles wrecked; poles and wires down; trees uprooted; some damage to growing crops. Livestock and much poultry killed; 7 people injured. Path about 10 miles long, from northwest. Light to heavy hail caused some damage to growing crops.
Anthony, Wis.	3	11 p. m.				Electrical.	School building struck by lightning, burned.
Barrett, Minn., and vicinity.	3-4	11 p. m.-12:30 a. m.			10,500	Thundersquall, hail.	Some farm buildings wrecked or damaged; trees uprooted; growing crops lodged; some livestock and poultry killed by wind; damage \$9,500. Light to heavy hail caused about \$1,000 damage to growing crops.
Sand Spring, Mont., 30 miles west in Garfield Co.	3-4	Midnight	15-10		12,000	Heavy hail, strong wind.	Length of path 10-15 miles; hail size of marbles; considerable damage to wheat, barley, alfalfa, oats, flax, and to windowpanes; \$10,000 crop loss.
Heron Lake, Minn., and vicinity.	4	6 a. m.	13		10,000	Hail	Light to heavy hail, accompanying severe thunderstorm, caused considerable damage to growing crops.
Terry, Mont., northeastern portion of Prairie Co.	4	3:30 a. m.	13-4		25,000	Moderate hail	Length of path, 14 miles; considerable damage to barley, spring and winter wheat. Stones 1/2 inch in diameter.
Virginia, Minn., and vicinity.	4	P. m.				Thundersqualls	A number of buildings damaged; trees uprooted.
Buffalo Co., Wis., northern portion.	4	Night			12,000	Thundersquall	2 barns blown down; 1 barn and other buildings damaged.
Denver, Colo., east of.	5	4:53-6 p. m.			3,000	Hail	Hailstones, size of golf balls, damaged shrubs, gardens, roofs, and windows of houses and automobiles.
Chouteau Co., Mont., Brady Section.	5	5-7 p. m.	11	0		Tornado	Small buildings moved; barn demolished. Path 2 miles long.
Hamilton Co., Kans.	5	8 p. m.		0	30,000	Tornado	Tornado struck airport hangar 1/4 mile north of Syracuse. Heavy rain and scattered hail caused some damage to crops. Hangar and 13 planes damaged.
Colfax Co., N. Mex.	6	2:30 p. m.			146,925	Heavy hail and electric.	In about same area as July 1 storm; 40 additional livestock killed; fences and stock water ponds damaged; 3 farm buildings struck by lightning.
Penrose and Portland, Colo.	6	3:30 p. m.	1,760		20,000	Hail, rain	Hailstones, size of golf balls, damaged roofs and windows of automobiles and houses; caused loss to cherries, grain; disrupted power and light service.
Rockingham Co., N. C.	6	5 p. m.			(?)	Hailstorm	Tobacco and corn damaged.
Colorado Springs, Colo.	7	2-8 p. m.			150,000	Heavy hail, flood	500 homes flooded; roads and bridges washed out; power and light services disrupted.
East Caroga Lake, N. Y.	7	2:25 p. m.	166	0	5,000	Tornado	Trees uprooted; 2 cottages and garages badly damaged.
Aurora, Colo.	7	4:10 p. m.			5,000	Rain, wind, lightning.	Small buildings blown over; some basements flooded.
Peerless, Mont., in southwest Daniels Co.	7	8 p. m.	440		30,000	Light to heavy hail, high wind, and lightning.	Stones 1/2 inch in diameter. Barley and wheat damaged. Severe lightning 30 miles east, building struck; property damage not known.
Little Skin Creek near Weston, W. Va.	7-8	Night and early morning.				Heavy thunder-shower.	Local flash flood caused some damage to crops.
Northwest South Carolina	8	Morning and afternoon.			25,000	Thunderstorms and hail.	Considerable crop damage locally, particularly in Spartanburg and Calhoun Falls areas.
Cleveland Co., N. C.	8	4 p. m.		1	(?)	Hail, wind	Just above Fallston, guinea-egg-sized hailstones. Growing corn beaten to ground, and leaves completely stripped from cotton plants. 1 man killed by lightning.
Granville Co., N. C.	8	4 p. m.			74,000	Hailstorm	Corn and tobacco damaged.
Tullahoma, Tenn.	8	4:25 p. m.				Wind and hail	Some damage to tobacco.
Jackson and Elbert Cos., Ga.	8	Late afternoon.	1 1/2 to 1		100,000	Hail	Possibly 2 different storms—both severe—one striking in western Elbert County about 3 p. m., the other striking on a line, more or less spotted, over a distance of 20 miles or more from near Commerce, in northeast Jackson County, through central Madison County into western Elbert County; time between 8 and 9 p. m. Much of cotton, corn, truck crops, fruit, etc., beaten to stubs; substantial damage to house roofs and windowpanes. 10 children injured, not seriously, from falling hail which measured up to 1 inch in diameter. One of worst storms ever to hit this section.
Portland and Florence, Colo.	8	P. m.			10,000	Rain	Flooded homes, roads, farms; disrupted power and light services.
Scobey, Mont., southwest Daniels Co.	8	9 p. m.			5,000	Light hail, high wind.	Small hail; light damage to wheat and barley; windmills and granaries blown down.
Hazelton, Idaho, and vicinity.	9	1:30-2 p. m.	11		Considerable.	Heavy hail	Hail up to 3/4 inch in diameter caused considerable damage to beans, beets, peas, and grain over area approximately 1 by 2 miles. Storm traveled from southwest to northeast.
Jerome, Idaho, near Institute, W. Va., and vicinity.	9	2:15 p. m.	13	0		Small tornado	Carried away the airport hangar.
	9	4:30 p. m.				Moderate hail	Damage apparently very slight.
Kersey, Colo.	9	P. m.		1		Lightning	A farmer killed in field.
Optimo, N. Mex.	9	P. m.				Moderate hail	Damage very local.
Lower Yakima Valley, Wash.	10	4:40-7:30 p. m.			58,000	Wind	Crop damage estimated, \$30,000; property damage, including that to several parked aircraft, hangar doors, roofs of residences, and utility lines, \$23,000.

See footnotes at end of table.

## SEVERE LOCAL STORMS FOR JULY 1947—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Rawlins Co., Kans.	July 1947	5:30-6 p. m.	11-2		\$24,000	Heavy hail	Near Herndon; moved from west; length of path, 4 miles.
Russell, Mont., northwest	10	8 p. m.	12½			do	Length of path, 3 miles; 1 to 40 percent damage to wheat, oats, and barley.
Chouteau Co.	10						
Lewistown, Mont., and vicinity.	11	2 p. m.	16		1,000,000	do	Length of path 20 miles. Hailstones size of baseballs. \$1,000,000 crop loss, mostly to small grains. All glass on west sides of buildings destroyed.
Elba, N. Y.	11	2:10 p. m.	1,760		250,000	Hail	Heavy hail, with stones 1 to 2 inches in diameter, destroyed muckland onions, lettuce, and spinach over 5-mile-long path.
Winifred, Mont., vicinity	11	2:30 p. m.	112		255,000	Heavy hail	Length of path, 40 miles; hailstones 9 inches in circumference; 50 windows broken in schoolhouse. Estimated \$250,000 crop loss to all grains, hay, and small gardens.
Phillips Co., Mont., south of Milk River.	11	4 p. m.	12-5		51,500	Moderate hail, high wind.	Length of path, 50 miles; hailstones ¼ to 1 inch in diameter. Damage spotted. Crop loss \$50,000, to wheat and sugarbeets. Two or three granaries blown down.
Malta, Mont., and vicinity	11	4 p. m.	11-6	1	51,000	Light to heavy hail, wind.	Length, 50 miles; ¼- to ¾-inch hailstones; \$50,000 crop loss to wheat, beets, and gardens. Granaries damaged.
Stanford, Mont., vicinity	11	4 p. m.	110			Moderate to heavy hail.	Length, 8 miles; stones ½ inch in diameter; considerable damage to barley, spring and winter wheat.
Moundsville, W. Va.	11	4:30 p. m.				Strong winds, heavy rain.	Trees uprooted; utility poles snapped; streets and gardens flooded. Roof blown off apartment building, causing \$500 damage.
Miles City, Mont., and vicinity.	11	5:25-6 p. m.	14½		2,500	Light to moderate hail.	Length of path, 22 miles; hail, size of marbles. Damaged wheat, oats, alfalfa, and range grass.
Ophelm, Mont., and vicinity.	11	5:45-8:30 p. m.	12	0	14,800	Light to moderate hail, tornado.	Length of path, 60 miles. Crop loss, \$14,000. Wheat, oats, and barley damaged; blew hay away; broke windows; blew down barn and several other buildings; windmill twisted off.
Glasgow, Mont., and vicinity.	11	6 p. m.	100		500	Hail, high wind	Length of path country-wide. Hail, size of peas. Little damage, only to wheat.
Corry, Pa.	11	6 p. m.				Thunderstorm	Gas station struck by lightning.
Peerless, Mont., southwest Daniels Co.	11	7:30 p. m.				Wind, rain	Considerable damage to buildings and crops.
Chinook, Mont., northeast and southwest Blaine Co.	11					Hail	Considerable damage; approximately 1,500-acre loss of grain crops.
Throughout N. Dak.	12	1-3 a. m.	1100		150,000	Severe wind, some hail.	Wind with velocities of 60 to 70 m. p. h., struck most parts of N. Dak. Farm buildings destroyed; at Bismarck, many trees and signs damaged. At Jamestown a radio range tower, some power lines, and telephone poles blown down; windmills and 4 buildings unroofed.
Cass Co., Nebr.	12	8:30-10 p. m.	17		100,000	Wind, hail, and floods.	Hail over path about 25 miles long. Numerous homes, several business houses flooded at Newhauka. Hail damage to corn and oats, about \$65,000.
Boone Co., W. Va.	About 12			1		Thunderstorm	One boy killed by lightning and 2 injured.
Doniphan Co., Kans.	13	12:30 a. m.	17		50,000	Severe wind	Some indication of tornado, but most damage from straight wind. Corn and wheat flattened; number of sheds and barns destroyed; roofs blown from houses. Most severe damage a mile west of Highland. Moved from north; length of path, 7 miles.
Lafayette, Ind.	13	7:20 a. m.	880	0	0	Tornado	Path southwest to northeast, about 6 miles long. Did not touch ground.
Southeastern part of Ind.	13	5 p. m.			320,000	Wind, hail	Minor damage general. Much damage in Shelby and Decatur Counties. Some hail up to 2 inches in diameter.
Yuma, Colo.	13	5:30 p. m.			30,000	Hail, wind	Wind and hail caused 20 to 90 percent loss to the wheat crop and wrecked 2 buildings.
Choteau Co., Mont., west of Carter.	13	8 p. m.	11		10,000	Heavy hail	¼-inch hailstones; considerable damage to wheat; length of path, 5 miles.
Salem, Ind.	13	9 p. m.			500,000	Flash flood	One of the worst floods on record. Water up to 7 feet deep on Water Street.
Nine Mile Creek, Wyo.	14	1-4 p. m.				Hail	Considerable damage to grain crop.
Granville Co., N. C.	14	3 p. m.			46,000	Hailstorm	Corn and tobacco damaged.
Caswell Co., N. C.	14	Mid-afternoon			(?)	Hail	Tobacco, corn, and other crops damaged.
Circleville, Ohio	14	Afternoon				Thunderstorm	Observer estimated 5 inches rainfall from 6 to 8 p. m.
Vance Co., N. C.	14	4 p. m.			100,000	Hail	Tobacco damaged.
Scranton, Pa., and vicinity	14	4:30 p. m.				do	Hailstones, size of half dollars, caused extensive damage to gardens.
Sugar Grove, W. Va., and vicinity.	14	5:30-7:30 p. m.	15		48,000	Heavy rain	Local flash flood damaged crops, buildings, and caused loss of livestock.
Holyoke, Colo., west of	14	8 p. m.	110		120,000	Hail	Severe property damage and loss of wheat crop in western Phillips County.
Carlisle, Pa.	14	Evening			500	Thunderstorm	1 home struck by lightning.
Sharon-Valley Forge, Wash.	14	Night				Thunderstorm, wind, hail.	Hailstones, large as walnuts, damaged wheat and peas over small area.
Derry, Pa.	14					Thunderstorm	Some tree limbs ripped off by winds; rain caused damage to gardens.
Ligonier, Pa.	14					do	Electric wires blown down.
North Adams, Mass.	15	5:30 p. m.			30,000	Electrical, heavy rain.	Lightning set fire to College Hall, resulting in extensive damage. Other buildings struck, with only slight damage. Water 3 feet deep in one section of city.
East Palestine, Ohio, near	15	Afternoon			5,000	Thunderstorm	Lightning burned large barn and all contents.
Western Oswego Co., N. Y.	15	7:30 p. m.				Wind	Thunderstorm winds swept over towns of Scriba, New Haven, Mexico, and western Richland, uprooting trees, damaging buildings, and disrupting telephone and electric services.
Westville, S. C., 2 miles east of	15	Evening		2		Lightning	2 persons killed.
West Palm Beach, Fla.	16	2:17-2:20 p. m.		0		Tornado	Observer at West Palm Beach Airport Station observed funnel cloud in sky to north of station. Tornado reached ground about 10 miles north.
Chatham Co., Ga.	16	3-4 p. m.			1,000	Hail	Hail, as big as hen's eggs, fell over a small area about 15 miles west-southwest of Savannah. Home gardens affected only.
Wayne County, N. C., southern portion.	16	Late afternoon				Wind, rain, and thunderstorm.	Storm assumed tornadic proportions in small section 5 miles northwest of Mount Olive, uprooting trees and demolishing a number of barns and outbuildings. Some crops seriously damaged.
Greenwood, Miss.	16	6:45 p. m.	11		35,000	High winds	Winds at Greenwood airport, 100 m. p. h., before power failure, with gusts 120 m. p. h. 8 Navy training planes wrecked, but not included in loss. Path about 8 miles long, moved from west-northwest to east-southeast. Damage to growing crops, \$10,000.
Amherst, Mass.	16	7-8 p. m.	25	0		Small tornado	Storm moved from northeast to southwest over path about ¼ mile long.
Center Square, Pa.	16	8:30 p. m.				Thunderstorm	Barn struck by lightning, burned.
Harrisburg, Pa., and vicinity.	16	Evening				do	Home and church struck by lightning; electric lines damaged.
Franklin, Pa.	16	Unknown		1		do	One man killed by lightning.
Columbus, Mont., vicinity of	16		880		500	Moderate hail	From west and north, with stones up to marble size. Wheat principal crop hurt. Storm path 1 mile long.
Baltimore, Md., and vicinity.	17	2 p. m.				Thunderstorm, hail, and wind.	Heavy rains inundated streets, disrupting traffic in many sections; some windows smashed and awnings torn by hail; part of Southern Hospital roof blown off, damaging 2 parked automobiles; trees, power lines, and poles down, and large wooden garage damaged.
Mountainair, N. Mex., northeast.	17	3 p. m.			50,000	Heavy hail, wind	Few buildings wrecked by high winds, but principal damage to crops.
Townsend, Mont., north of	17	3:30 p. m.	115		3,000	Light hail, lightning	Hailstones ¼-½ inch in diameter; length, 18 miles; no crop loss; \$3,000 barn destroyed.

See footnotes at end of table.

## SEVERE LOCAL STORMS FOR JULY 1947—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
<b>July 1947</b>							
Portales, N. Mex.	17	P. m.		1		Severe electric.	Lightning struck group of farm workers, killing 1 and stunning 10 others.
Cadiz, Ohio, near	17	Afternoon		1		Thunderstorm.	Man killed by lightning.
Columbia, S. O.	18	1:53-2:50 p. m.				do.	High winds and excessive rains caused some power interruption and flooding in low areas.
Ryegate, Mont., and vicinity.	18	3:30 p. m.	11			Light hail.	Length, 7 miles; small, soft hail. Some damage to wheat.
Laurel, Mont., south of.	18	5 p. m.	12			Moderate hail.	Small stones; 20 to 90 percent of crops damaged, mainly wheat.
Shelby, Mont., and vicinity.	18	6 p. m.	11		\$10,000	do.	Length, 6 miles; hailstones size of peas. Crop loss, \$10,000, mostly to wheat.
Utica, Miss.	18	9:50 p. m.	440	0	9,000	High wind, hail, possible tornado.	Path 4 miles long. Damage to growing crops, \$3,000. Several houses unroofed or twisted from foundations; total destruction of 3 small farm homes. Moved from northwest to southeast.
Southwest Blaine Co., near Missouri Breaks, Mont.	18					Heavy hail.	Hail size of hens' eggs caused 100 percent loss to approximately 500 acres of crops.
Harlowton, Mont., and vicinity.	18		11			Heavy hail, severe wind.	Hailstones $\frac{1}{4}$ - $\frac{3}{4}$ inch in diameter. Considerable damage to wheat and flax.
Vicinity of Lake Park, Minn.	19	1:45 p. m.	12		20,000	Hail, thunderstorm.	Much damage to growing crops.
Center, Colo.	19	2:30 p. m.	5,340		40,000	Hail.	$\frac{5}{8}$ -inch hailstones caused considerable damage to potatoes, grain, and alfalfa crops, 3 miles northeast of Center.
Corson County, S. Dak.	19	3:50-4:10 p. m.	14			High wind, rain, and hail.	Damaged crops and property in a 40-mile strip in vicinity of McLaughlin.
Hyde County, S. Dak.	19	6:30 p. m.	14			do.	Damaged crops and property; crippled and killed some livestock and poultry in an area of about 6 miles north of Holabird.
Cut Bank, Mont., to Shelby.	19	8 p. m.	15		250,000	Heavy hail.	Length, 33 miles; hailstones size of marbles. Severe damage to wheat and barley; some roofs and windows damaged.
Holt and Boyd Counties, Nebr.	19	8:30-9 p. m. C. S. T.	14 to 5		610,000	Hail and wind.	Moved from O'Neill to central Boyd County. Hail damage to small grains, about \$600,000, principally to wheat, oats, and corn. About \$2,000 wind damage to grain in shock and \$8,000 to barns. Length of path, 15 miles.
Wibaux, Mont., northeast of Pineview, Mont., northeast of Yellowstone County.	19		Varied			Heavy hail.	300 acres of grain damaged.
Glendive, Mont., and vicinity.	19		12		60,000	do.	Length, 15 miles; hailstones size of hickory nuts; 75 to 90 percent damage to wheat and beets.
Lakeville, Pa.	19					Thunderstorm.	Length, 40 miles; $\frac{1}{2}$ -inch hailstones. Severe damage to grain and gardens; crop loss, \$60,000.
Cut Bank, Mont., and vicinity.	20	7:30 p. m.	110		500,000	Heavy hail.	High winds felled trees, and rain caused considerable damage to gardens and roads.
Cleveland County, N. C., northern portion.	21	3:30 p. m.				Hail and wind.	Length, 35 miles; stones size of marbles. Crop loss, \$500,000. Damage to barley, mustard, and spring wheat; 450 chickens killed.
Rockingham County, N. C.	21	4 p. m.			(?)	Hail.	Struck on much the same course as the July 8 storm. Cotton, recovering from previous storm, was whipped to shreds, with 100 percent loss in some fields. County agent estimated loss for 2 storms at \$300,000, with \$200,000 damage to cotton, \$90,000 to corn, and \$10,000 to other crops.
Morrill, western half of Box Butte, and eastern Cheyenne Counties, Nebr.	21	3-4:30 p. m. M. S. T.	15 to 13		3,000,000	Severe hail, strong winds.	Tobacco and corn damaged.
South of Stockett or Sand Coulee, Mont.	21		Several		50,000	Heavy hail.	Most of damage to wheat crop. Large acreage of sugarbeets materially damaged; chickens and sows killed; small buildings wrecked, mostly by wind. Length of hail-damaged area, 100 miles in Nebraska. Storm extended into South Platte Valley in Colorado.
Glendive, Mont., south-central, Dawson County.	22	2-5 p. m.	13-6		700,000	do.	Hailstones $\frac{1}{2}$ inch in diameter; crops of all kinds destroyed on 25 or 30 farms.
Dawson Co., Mont., northwestern portion.	22	2:30-3 p. m.	14-6		100,000	do.	Length, 70 miles; hailstones up to size of eggs. Crops damaged.
Cleveland, Ohio, near.	22	Afternoon				Hail.	Storm from north; path 50 miles long. Damage mainly to wheat and flax.
Clayton, N. Mex., 20 miles west.	22	3 p. m.			10,000	Heavy hail and wind.	In a few spots hail accumulated in ditches or along curbs in depths up to 18 inches.
Prairie Co., Mont., extreme eastern portion.	22	5-5:15 p. m.	13		1,000	Moderate hail.	Hailstones $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter caused slight damage, principally to flax and range grass. Storm came from northwest; path 5 miles long.
South of Buffalo, Mont., towards Garneill in Judith Basin.	23	3-3:20 p. m.	15			Heavy hail.	Storm from west, with stones size of marbles; length of path, 5 miles or more. Storm followed by heavy rain.
Miles City, Mont., near.	23	Afternoon	13		6,000	Moderate hail and wind.	Storm from northwest; path 5 miles long. Grain damage by wind, \$1,000; hail, \$5,000. Stones size of marbles. Duration 15 minutes.
Blaine Co., Mont., northwestern portion.	23	6 p. m.	13		20,000	Heavy hail.	Storm came from west; length of path unknown; damage to grains.
Malta, Mont., near.	23	7-7:30 p. m.	11-2		35,000	Moderate to heavy hail and wind.	Storm from west and northwest caused severe damage to wheat, oats, and flax; damage by hail, \$30,000; by wind, \$5,000.
Near Cardwell, Mont., Madison Co.	24	3-3:05 p. m.	440		3,000	Moderate hail.	Storm from southwest; considerable damage to grains and hay. Stones size of peas.
Helena to Townsend, Mont.	24	Afternoon	11			Light to moderate hail.	Little damage except to gardens in Helena and some sugarbeet fields. Duration, 5 minutes.
Chouteau Co., Mont., southeastern portion.	25	do.				Heavy hail.	800 acres completely destroyed with 1,600-2,000 acres partially destroyed, wheat and barley principally. Duration, 30 minutes.
Southeastern Deuel and southwestern Keith Cos., Nebr.	25	4:30-6 p. m. M. S. T.	14		210,000	do.	Principal damage to wheat, oats, and barley. Path about 10 miles long, northwest of Big Springs to north of Brule.
Telegraph Creek, Mont., near.	25	8-9 p. m.	14-6		65,000	Heavy hail, strong wind.	Damage by $\frac{3}{4}$ -inch hailstones, \$50,000; by wind, \$15,000. Path 25 miles long. Wheat and oats damaged.
Lincoln Co., about 5 miles southwest of Maxwell, Nebr.	25-26	11 p. m.-3 a. m. C. S. T.	12		102,000	Windsquall.	Hay and grain scattered; wheat and rye shattered and broken. Length of path 8 to 9 miles. Some tornadic characteristics within the larger path.
Glendive, Mont., near.	26	12-2 a. m.			10,000	Hail.	Hail swept length of county.
Terry, Mont., near.	26	12:15-12:27 a. m.	13		20,000	Hail, wind.	$\frac{1}{2}$ -inch hail in path 10 miles long did considerable damage to wheat and flax. Storm from northwest. Wind caused \$500 damage to property and \$1,000 to crops.
Wibaux, Mont.	26	1:15-1:35 a. m.	12		20,000	do.	Hail $\frac{1}{4}$ -inch diameter caused \$10,000 damage to grain over path 5 miles long. Wind caused equal amount of damage to property.
Bismarck, N. Dak.	26	4 a. m.	15		50,000	Severe wind.	A severe thunderstorm struck Bismarck. Many large trees uprooted; plate glass windows broken; wall of brick garage blown out; electric poles blown down.
Wisconsin, central cos.	26-27	5:30 p. m. on 26th-2 a. m. on 27th.		1	150,000	Line squall, electrical, heavy rain, hail.	Local flood damage to highways, bridges, and other property in Trempealeau and Eau Claire Counties, \$12,000. 14 barns and other buildings blown down, more damaged; 7 cattle killed; many trees down; utility service disrupted in Wood and other central counties; loss, \$120,000. Lightning in Brown and Outagamie Counties burned 2 filled barns, killing 7 cattle and 50 chickens; also burned 2 other buildings; loss, \$27,000. Wind, rain, and hail lodged and damaged crops in wide area; loss not estimated.

See footnotes at end of table.

## SEVERE LOCAL STORMS FOR JULY 1947—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Miles City, Mont., near	July 1947 26	Evening	1 2		\$1,400	Hail, wind	Hail size of marbles in a path 5 miles long did slight damage to wheat, barley, and oats. Wind damage to crops amounted to \$400.
Golva, N. Dak.	27	2 a. m.	1 5		20,000	Severe wind	5 barns blown down; 1 steel grain bin blown over, smashing truck in path.
South Bend, Ind.	27	4 a. m.			1,000	Wind	Trees and wires down.
Pt. Pleasant northeastward to Clarksburg, W. Va.	27-28	5 p. m. on 27th-6 a. m. on 28th.	1 50		300,000	Heavy thunder-showers, some hail.	Heavy rains and local flash floods damaged crops, gardens, city streets, and highways; undermined foundations and retaining walls; flooded basements.
Morgan and Brown Cos., Ind.	27	5:30 p. m.	880	0	200,000	Tornado	Path northwest to southeast. Considerable damage at Bean Blossom and Fruitdale.
St. Maries, Idaho, and vicinity.	27	5:45 p. m.	1 10-12			Strong winds	Strong winds caused an estimated loss of 10 percent to oats
Orange and Lawrence Cos., Ind.	27	7 p. m.	1 5		10,000	Wind	Buildings and trees damaged.
Pike Co., Ind.	27	7 p. m.	1 4		6,000	Wind and hail	Hail up to 3 inches in diameter.
Columbia, S. C.	28	2:30-9:45 p. m.			10,100	Thunderstorms	Storms did considerable damage to trees and wires, interrupting electric service.
Caswell Co., N. C.	28	Mid-afternoon				Hail	Estimated total damage by storms on 14th and 28th: to tobacco, \$100,000; to corn, \$7,000; and to other crops, \$2,000.
Greater Boston area, Mass.	28	4:45-5:50 p. m. E. D. S. T.			25,000	Electrical, heavy rain.	Lightning caused minor damage to 12 residences and 2 churches. Fire caused by lightning destroyed barn, 1 horse, and 3 cows in Quincy, Mass.
Rockingham Co., N. C.	28	5 p. m.				Hail	Estimated total damage by storms on 6th, 21st, and 28th: to tobacco, \$300,000; to corn, \$20,000.
Jacksonville, Fla.	29	3:30-3:45 p. m.	100		3,840	High wind, hail	Building unroofed at Duval County Prison Farm. Hailstones averaged $\frac{1}{4}$ inch in diameter.
Liverpool, Pa., and vicinity	29	6:30 p. m.				Thunderstorm	Hailstones up to 1 inch in diameter. Wind, hail, and rain caused extensive damage to crops and gardens, broke windows, uprooted trees, unroofed buildings, and blew down a silo.
Aroostook Co., Maine	31	2-6 p. m.			250,000	Heavy wind and heavy hail.	Maximum damage, due mostly to hail unevenly distributed, confined to 2 narrow strips extending from Eagle Lake to Frenchville, and from Patten to Littleton. Wind 40 to 50 m. p. h.; a barn at Ludlow unroofed. 3,700 acres of potatoes and 300 acres of peas damaged. Hailstones at Houlton, Maine, $\frac{1}{2}$ to $\frac{3}{4}$ of an inch in diameter, but in the shape of a flattened disc, with a white, opaque core about the size of a medium pea, surrounded by clear ice to the outer edge.
Luray, Va., airport	31	2-2:30 p. m.	67			Wind	Hanger blown down.
Danville, Va.	31	Afternoon				Electrical	Transformers burned out.
Buena Vista, Va.	31	do		1		Tornadoic wind	Considerable structural damage done.
Canaan Valley area, W. Va.	31	do				Heavy thunder-shower with strong winds.	Damage apparently slight.
Huntington, W. Va.	31	3:23-4:35 p. m.	1 3		2,500	Heavy thunder-shower, hail.	Several buildings struck by lightning. Moderate hail; stones $\frac{1}{4}$ -1 inch in diameter.
Albemarle Co., Va., Batesville section.	31	3:45-4:15 p. m.				Hail and wind	4,000-5,000 bushels of peaches destroyed.
Augusta Co., Va.	31	4-6:30 p. m.	1 4			Wind and hail	Considerable damage to corn and other crops.
Prince Edward Co., Va.	31	5-6 p. m.	1,760		6,000	Hail and wind	Small area just north of the Keysville tornado path suffered damage mostly from hail, to crops, livestock, and property.
Logan, W. Va.	31	5:20-5:45 p. m.				Thunderstorm with strong winds, moderate hail.	Several buildings damaged, power and telephone lines broken by falling trees.
Roanoke, Salem, and Vinton, Va.	31	5:41-9:13 p. m.				Electrical	Transformers burned out; telephone, telegraph, and power lines out of commission.
Halifax Co., Va.	31	6-9 p. m.			3,000	Hail	Tobacco crop damaged.
Phenix to Rehoboth, Charlotte, and Lunenburg Cos. Va.	31	6:30-7:30 p. m.	1 2	0	280,000	Tornado, hail, and wind.	Path of tornado about 20 miles long; funnel cloud bounced over area affected, except in Keysville area where it kept to the ground and where the major damage occurred; areas in both counties away from tornado path also suffered severe damage from hail and wind, especially tobacco.
Bluefield to Oakvale, W. Va., and southeastward into Va.	31	6:30 p. m.				Severe electrical storm with strong winds.	Power and communication lines damaged.
Cardwell, Mont., in Madison Co.	31	9-9:05 p. m.	440		3,000	Hail	Hail size of peas; path 1 mile long; considerable damage to gardens, grains.
Hazelton, Idaho, and vicinity	31	10:20-10:30 p. m.	1 3		30,000	Strong winds	Uprooted trees, blew down utility poles, and caused considerable damage to peas and beans.
Powhatan Co., Va., Jefferson area.	31				20,000	Hail	Tobacco totally destroyed; corn badly damaged.

<sup>1</sup> Miles instead of yards.<sup>2</sup> See remarks on storm in same area on July 21.<sup>3</sup> See remarks on storm in same county on July 28.